

I claim:

1.

In combination:

a truck comprising a wheeled frame having rearward and forward ends, and a cab

mounted on the forward end of said wheeled frame;

a rotatable pedestal assembly mounted on said wheeled frame rearwardly of said cab;

a telescopic boom assembly having inner and outer ends;

said boom assembly having its inner end pivotally secured, about a horizontal axis, to
said pedestal;

a first hydraulic cylinder pivotally connecting said telescopic boom assembly to said
pedestal for pivotally moving said telescopic boom assembly with respect to said
pedestal;

said telescopic boom assembly comprising an inner first boom member having inner
and outer ends and first and second sides, at least one intermediate boom
member, having inner and outer ends, telescopically mounted in said inner boom
member which is movable between retracted and extended positions with
respect to said inner boom member, and an outer boom member having inner
and outer ends, telescopically mounted in said intermediate boom member,
which is movable between retracted and extended positions with respect to said
intermediate boom member;

said outer boom member being movable with said intermediate boom member as said
intermediate boom member is retracted and extended;

1 a first concrete conduit, having inner and outer ends, positioned at said first side of said
inner boom member;

said inner end of said first concrete conduit being positioned at said inner end of said
inner boom member;

5 said outer end of said first concrete conduit being positioned at said outer end of said
inner boom member;

said inner end of said first concrete conduit being in communication with a source of
concrete under pressure;

10 an elongated, flexible concrete hose having first and second ends;

said first end of said flexible concrete hose being operatively connected to said outer
end of said first concrete conduit;

a first elongated support, having inner and outer ends, mounted on said inner boom
member at said first side thereof;

15 a second elongated support, having inner and outer ends, mounted on said inner boom
member at said second side thereof;

a third elongated support, having inner and outer ends, movably mounted on said
second elongated support;

20 said third elongated support being movable between retracted and extended positions
with respect to said second elongated support;

said outer end of said third elongated support being operatively secured to said outer
end of said intermediate boom member so that said third elongated support
moves from its said retracted position to its said extended position as said

25

1 intermediate boom member is moved from its said retracted position to its said
extended position;

a second concrete conduit, having inner and outer ends;

said inner end of said second concrete conduit being in fluid communication with said
5 second end of said flexible concrete hose;

said second concrete conduit being secured to said outer end of said outer boom
member for movement therewith;

said second concrete conduit being positioned on said third elongated support when
said outer boom member is in its said retracted position;

10 said second concrete conduit extending from said outer end of said third elongated
support when said outer boom member is in its said extended position;

said flexible concrete hose being positioned on said first elongated support and at least
partially upon said second elongated support when said intermediate and outer
15 boom members are in their said retracted positions;

a concrete discharge conduit operatively secured to said outer end of said second
concrete conduit;

said concrete discharge conduit comprising a rigid jib boom member, having inner and
outer ends, pivotally secured to the outer end of said outer boom member;

20 and a supporting truss, having inner and outer ends, associated with said rigid jib boom.

2.

The combination of claim 1 wherein said supporting truss comprises a lattice
truss.

25

3.

1 The combination of claim 2 wherein said jib boom member is secured to and is positioned within said lattice truss.

4.

5 The combination of claim 3 wherein said rigid jib boom member includes a self-aligning mechanism which normally maintains said rigid jib boom member in an aligned relationship with respect to said inner boom member.

5.

10 The combination of claim 3 wherein a flexible concrete discharge hose is secured to said outer end of said rigid jib boom member.

6.

15 The combination of claim 1 wherein said flexible concrete hose is generally U-shaped when the intermediate boom member and said outer boom member are in their said retracted positions.

7.

 The combination of claim 1 wherein said first elongated support is generally L-shaped in cross section.

8.

20 The combination of claim 1 wherein said second elongated support is generally U-shaped in cross section.

9.

1 The combination of claim 1 wherein said third elongated support is generally
U-shaped in cross section.

10.

5 The combination of claim 1 wherein said first concrete conduit comprises a rigid
pipe.

11.

10 The combination of claim 1 wherein said third concrete conduit comprises a rigid
pipe.

12.

15 The combination of claim 1 wherein said concrete discharge conduit comprises a
rigid jib boom member pivotally and rotatably secured to the outer end of said outer
boom member.

13.

20 The combination of claim 1 wherein a winch means is secured to said outer end
of said supporting truss.

14.

25 The combination of claim 2 wherein a winch means is secured to said outer end
of said lattice truss.

15.

30 The combination of claim 14 wherein said winch means is selectively removably
secured to said lattice truss.

16.

1 The combination of claim 3 wherein a winch means is secured to said outer end
of said lattice truss.

17.

5 The combination of claim 16 wherein said winch means is selectively removably
secured to said lattice truss.

18.

In combination:

10 a truck comprising a wheeled frame having rearward and forward ends, and a cab
mounted on the forward end of said wheeled frame;

a rotatable pedestal assembly mounted on said wheeled frame rearwardly of said cab;

a telescopic boom assembly having inner and outer ends;

15 said boom assembly having its inner end pivotally secured, about a horizontal axis, to
said pedestal;

a first hydraulic cylinder pivotally connecting said telescopic boom assembly to said
pedestal for pivotally moving said telescopic boom assembly with respect to said
pedestal;

20 said telescopic boom assembly comprising an inner first boom member having inner
and outer ends and first and second sides, at least one intermediate boom
member, having inner and outer ends, telescopically mounted in said inner boom
member which is movable between retracted and extended positions with
respect to said inner boom member, and an outer boom member having inner

1

and outer ends, telescopically mounted in said intermediate boom member,
which is movable between retracted and extended positions with respect to said
intermediate boom member;

5

said outer boom member being movable with said intermediate boom member as said
intermediate boom member is retracted and extended;

a first concrete conduit, having inner and outer ends, positioned at said first side of said
inner boom member;

10

said inner end of said first concrete conduit being in communication with a source of
concrete under pressure;

an elongated, flexible concrete hose having first and second ends;

said first end of said flexible concrete hose being operatively fluidly connected to said
outer end of said first concrete conduit;

15

a first elongated support, having inner and outer ends, mounted on said inner boom
member at said first side thereof;

a second elongated support, having inner and outer ends, mounted on said inner boom
member at said second side thereof;

20

a third elongated support, having inner and outer ends, movably mounted on said
second elongated support;

said third elongated support being movable between retracted and extended positions
with respect to said second elongated support;

said outer end of said third elongated support being operatively secured to said
intermediate boom member so that said third elongated support moves from its

25

1 said retracted position to its said extended position as said intermediate boom
member is moved from its said retracted position to its said extended position;
a second concrete conduit, having inner and outer ends;
said inner end of said second concrete conduit being in fluid communication with said
5 second end of said flexible concrete hose;
said second concrete conduit being operatively secured to said outer end of said outer
boom member for movement therewith;
said second concrete conduit being positioned on said third elongated support when
said outer boom member is in its said retracted position;
10 said second concrete conduit extending from said outer end of said third elongated
support when said outer boom member is in its said extended position;
said flexible concrete hose being positioned on said first elongated support and at least
partially upon said second elongated support when said intermediate and outer
15 boom members are in their said retracted positions;
a concrete discharge conduit operatively secured to said outer end of said second
concrete conduit;
said concrete discharge conduit comprising a rigid jib boom member, having inner and
outer ends, pivotally secured to the outer end of said outer boom member;
20 and a supporting truss, having inner and outer ends, associated with said rigid jib boom.

19.

The combination of claim 18 wherein said supporting truss comprises a lattice
truss.

20.

1 The combination of claim 19 wherein said jib boom member is secured to and is positioned within said lattice truss.

21.

5 The combination of claim 19 wherein a winch means is secured to said outer end of said lattice truss.

22.

10 The combination of claim 19 wherein said winch means is selectively removably secured to said lattice truss.

23.

15 The combination of claim 18 wherein said rigid jib boom member includes a self-aligning mechanism which normally maintains said rigid jib boom member in an aligned relationship with respect to said inner boom member.

24.

20 The combination of claim 18 wherein a flexible concrete discharge hose is secured to said outer end of said rigid jib boom member.

25.

25 The combination of claim 18 wherein said flexible concrete hose is generally U-shaped when the intermediate boom member and said outer boom member are in their said retracted positions.

26.

1 The combination of claim 18 wherein said first elongated support is generally
L-shaped in cross section.

27.

5 The combination of claim 18 wherein said second elongated support is generally
U-shaped in cross section.

28.

10 The combination of claim 18 wherein said third elongated support is generally
U-shaped in cross section.

29.

15 The combination of claim 18 wherein said first concrete conduit comprises a rigid
pipe.

30.

20 The combination of claim 18 wherein said third concrete conduit comprises a
rigid pipe.

31.

25 The combination of claim 18 wherein said concrete discharge conduit comprises
a rigid jib boom member pivotally and rotatably secured to the outer end of said outer
boom member.

32.

30 The combination of claim 31 wherein the pivotal axis and the rotational axis of
said jib boom member are transversely disposed with respect to one another.

33.

1 In combination:

a truck comprising a wheeled frame having rearward and forward ends, and a cab
mounted on the forward end of said wheeled frame;

5 a rotatable pedestal assembly mounted on said wheeled frame rearwardly of said cab;

a telescopic boom assembly having inner and outer ends

said boom assembly having its inner end pivotally secured, about a horizontal axis, to
said pedestal;

10 said telescopic boom assembly being movable between retracted and extended
positions;

a concrete conduit means, having inner and outer ends, positioned on said boom
assembly;

15 said inner end of said concrete conduit means being positioned at said inner end of said
boom assembly;

said outer end of said concrete conduit means being positioned at said outer end of said
boom assembly;

20 said inner end of said concrete conduit means being in communication with a source of
concrete under pressure;

a concrete discharge conduit operatively secured to said outer end of said concrete
conduit means;

25 said concrete discharge conduit comprising a rigid jib boom member, having inner and
outer ends, pivotally secured to the outer end of said boom assembly;

1 and a jib boom supporting truss, having inner and outer ends, associated with said jib
boom member.

34.

5 The combination of claim 33 wherein said jib boom supporting truss comprises a
lattice truss.

35.

The combination of claim 34 wherein said jib boom member is secured to and is
positioned within said lattice truss.

36.

10 The combination of claim 33 wherein said rigid jib boom member includes a self-
aligning mechanism which normally maintains said rigid jib boom member in an aligned
relationship with respect to said boom assembly.

37.

15 The combination of claim 33 wherein a flexible concrete discharge hose is
secured to said outer end of said rigid jib boom member.

38.

20 The combination of claim 33 wherein a winch means is mounted on the outer end
of said supporting truss.

39.

25 The combination of claim 38 wherein said winch means is selectively removably
mounted on said truss.

40.

1 The combination of claim 34 wherein a winch means is mounted on the outer end
of said lattice truss.

41.

5 The combination of claim 40 wherein said winch means is selectively removably
mounted on said lattice truss.

42.

10 The combination of claim 35 wherein a winch means is mounted on the outer end
of said lattice truss.

43.

15 The combination of claim 42 wherein said winch means is selectively removably
mounted on said lattice truss.

44.

20 The combination of claim 40 wherein said concrete discharge conduit comprises
a rigid jib boom member pivotally and rotatably secured to the outer end of said boom
assembly.

45.

25 The combination of claim 44 wherein the pivotal axis and the rotational axis of
said jib boom member are transversely disposed with respect to one another.